

## CLAIMS

1. A task management system comprising:

a judgment unit judging whether or not an execution of a registration target task gaining an access to a specified resource can be completed before an elapse of deadline time thereof even if an execution start timing of the registration target task is delayed when registering the task;

a registration unit registering, as an execution target task, the registration target task judged such that the execution thereof can be completed before the elapse of the deadline time; and

a control unit halting a resource assignment to a task trying to access the specified resource afterward till a resource assignment to a task having earlier accessed to the specified resource is completed among the tasks registered as the execution target tasks when switching over the task.

2. A task management system comprising:

a judgment unit judging whether or not an execution of a registration target task gaining an access to a specified resource can be completed before an elapse of deadline time thereof even if an execution start timing of the registration target task is delayed when registering the task;

a registration unit registering, as an execution target task, the registration target task judged such that the execution thereof can be completed before the elapse of the deadline time;

an execution unit preferentially executing a task having a shorter period of deadline time among the tasks registered as the execution target tasks; and

5 a control unit halting a resource assignment to a task trying to access the specified resource afterward till a resource assignment to a task having earlier accessed to the specified resource is completed among the tasks registered as the execution target tasks when switching over the task.

10 3. A task management method comprising:

a step of judging whether or not an execution of a registration target task gaining an access to a specified resource can be completed before an elapse of deadline time thereof even if an execution start timing of the registration target task is delayed when registering the task;

15 a step of registering, as an execution target task, the registration target task judged such that the execution thereof can be completed before the elapse of the deadline time; and

20 a step of halting a resource assignment to a task trying to access the specified resource afterward till a resource assignment to a task having earlier accessed to the specified resource is completed among the tasks registered as the execution target tasks when switching over the task.

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4. A task management method comprising:

a step of judging whether or not an execution of a

registration target task gaining an access to a specified resource can be completed before an elapse of deadline time thereof even if an execution start timing of the registration target task is delayed when registering the task;

- 5           a step of for registering, as an execution target task, the registration target task judged such that the execution thereof can be completed before the elapse of the deadline time;

- 10           a step of preferentially executing a task having a shorter period of deadline time among the tasks registered as the execution target tasks; and

- 15           a step of halting a resource assignment to a task trying to access the specified resource afterward till a resource assignment to a task having earlier accessed to the specified resource is completed among the tasks registered as the execution target tasks when switching over the task.